Assessment of Proposed Mandatory Health Insurance for Cognitive Rehabilitation

A Report to the Governor and the Legislature of the State of Hawaii

Report No. 04-11
November 2004

THE AUDITOR
STATE OF HAWAII

The Office of the Auditor

The missions of the Office of the Auditor are assigned by the Hawaii State Constitution (Article VII, Section 10). The primary mission is to conduct post audits of the transactions, accounts, programs, and performance of public agencies. A supplemental mission is to conduct such other investigations and prepare such additional reports as may be directed by the Legislature.

Under its assigned missions, the office conducts the following types of examinations:

1. *Financial audits* attest to the fairness of the financial statements of agencies. They examine the adequacy of the financial records and accounting and internal controls, and they determine the legality and propriety of expenditures.

2. *Management audits*, which are also referred to as *performance audits*, examine the effectiveness of programs or the efficiency of agencies or both. These audits are also called *program audits*, when they focus on whether programs are attaining the objectives and results expected of them, and *operations audits*, when they examine how well agencies are organized and managed and how efficiently they acquire and utilize resources.

3. *Sunset evaluations* evaluate new professional and occupational licensing programs to determine whether the programs should be terminated, continued, or modified. These evaluations are conducted in accordance with criteria established by statute.

4. *Sunrise analyses* are similar to sunset evaluations, but they apply to proposed rather than existing regulatory programs. Before a new professional and occupational licensing program can be enacted, the statutes require that the measure be analyzed by the Office of the Auditor as to its probable effects.

5. *Health insurance analyses* examine bills that propose to mandate certain health insurance benefits. Such bills cannot be enacted unless they are referred to the Office of the Auditor for an assessment of the social and financial impact of the proposed measure.

6. *Analyses of proposed special funds* and existing *trust and revolving funds* determine if proposals to establish these funds are existing funds meet legislative criteria.

7. *Procurement compliance audits* and other *procurement-related monitoring* assist the Legislature in overseeing government procurement practices.

8. *Fiscal accountability reports* analyze expenditures by the state Department of Education in various areas.

9. *Special studies* respond to requests from both houses of the Legislature. The studies usually address specific problems for which the Legislature is seeking solutions.

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THE AUDITOR
STATE OF HAWAII
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OVERVIEW

Assessment of Proposed Mandatory Health Insurance for Cognitive Rehabilitation

Report No. 04-11, November 2004

Summary

We assessed the social and financial impacts of mandating insurance coverage for cognitive rehabilitation services for those with traumatic brain injury, pursuant to Sections 23-51 and 23-52, Hawaii Revised Statutes (HRS). The Legislature requested this assessment through Senate Concurrent Resolution No. 37.

Broadly defined, traumatic brain injury is an injury to the brain from externally inflicted trauma. Traumatic brain injury often results in an impairment of cognitive abilities or physical functioning. Cognitive and behavioral deficits, as opposed to motor impairments, account for the greatest share of long-term disability, financial dependence, and family distress for those with chronic injuries. Therefore, there is general agreement among psychologists that cognitive rehabilitation is an important component of treatment for traumatic brain injury survivors.

Cognitive rehabilitation refers to a variety of intervention strategies or techniques that attempt to help patients reduce, manage or cope with cognitive defects caused by brain injury. These cognitive impairments may include: impaired memory or retrieval of information, impaired comprehension, slow thought processing, reduced attention span, difficulty understanding cause and effect, inability to prioritize thoughts or determine the main idea, difficulty following a schedule, and misunderstanding or misperceptions of abstract, conceptual, or complex information. Cognitive rehabilitation strategies are comprised of tasks designed to retrain the individual or alleviate problems caused by deficits in attention, visual processing, problem solving, executive functions, memory, language, and reasoning skills.

Until 2000, Hawaii residents with traumatic brain injury received cognitive rehabilitation at the Hawaii State Hospital but budget constraints eliminated that program in 2000. Subsequently, one of the discontinued program's doctors opened his own clinic to provide these services, often as charitable work. Then that doctor died, and services are no longer readily available to traumatic brain injury survivors. Noting the lack of services, long rehabilitation process for traumatic brain injury patients, and the lack of coverage by some health benefit plans, the 2004 Legislature expressed concern about the situation.

While proponents feel there is no doubt about cognitive rehabilitation's effectiveness, our review found that more conclusive information is needed before mandated health insurance requirements are enacted. Current literature indicates scientific studies are on-going, and existing studies have not definitively determined the efficacy of cognitive rehabilitation for traumatic brain injuries. Much of the

research has been largely anecdotal. Definitive scientific studies are still in their infancy, and part of the problem with existing studies is the lack of a standard definition for cognitive rehabilitation.

According to an official at the State Department of Health, there is currently no standard operational definition of cognitive rehabilitation. According to the National Academy of Neuropsychology, despite difficulties inherent in the measurement and definition of cognitive rehabilitation, some techniques apparently have improved the quality of life and functional outcomes of brain injury patients; however, there remains a need for more evidence-based work to further define and tailor cost-effective cognitive rehabilitation treatment.

In addition to the lack of more conclusive studies, conflicting survey results from consumers and insurance companies led us to conclude that the social and financial impact of health insurance coverage for cognitive rehabilitation for traumatic brain injury cannot be determined at this time. We received responses from 14 consumer groups and five insurance companies. The three labor unions that responded expressed no overall position since their members have not expressed an interest in coverage, and they had no data to report.

An example of a conflicting response is in the area of the level of public demand for the treatment or service. For the most part, consumers indicated a moderate to significant demand for services, while insurers indicated little to no demand. Insurers estimated there would be zero to about 100 patients a year, but one insurer stated that the uncertain definition of cognitive rehabilitation makes it difficult to identify which specific services would be included. Two consumers indicated that specific demand numbers were not available.

Recommendations and Response

We did not make any recommendations.

Both the Departments of Commerce and Consumer Affairs and Health opted not to provide responses.

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State Auditor
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Assessment of Proposed Mandatory Health Insurance for Cognitive Rehabilitation

A Report to the Governor and the Legislature of the State of Hawaii

Submitted by

THE AUDITOR
STATE OF HAWAII

Report No. 04-11
November 2004

Foreword

We assessed the social and financial impacts of mandating insurance coverage for cognitive rehabilitation services for those with traumatic brain injury, pursuant to Sections 23-51 and 23-52, Hawaii Revised Statutes (HRS). The Legislature requested this assessment through Senate Concurrent Resolution No. 37.

We acknowledge the cooperation of the Departments of Commerce and Consumer Affairs and Health and other organizations and individuals.

Marion M. Higa
State Auditor

Table of Contents

Chapter 1
Introduction

Introduction

Broadly defined, traumatic brain injury is an injury to the brain from externally inflicted trauma. Traumatic brain injury often results in an impairment of cognitive abilities or physical functioning. Cognitive and behavioral deficits, as opposed to motor impairments, account for the greatest share of long-term disability, financial dependence, and family distress for those with chronic injuries. Therefore, there is general agreement among psychologists that cognitive rehabilitation is an important component of treatment for traumatic brain injury survivors.

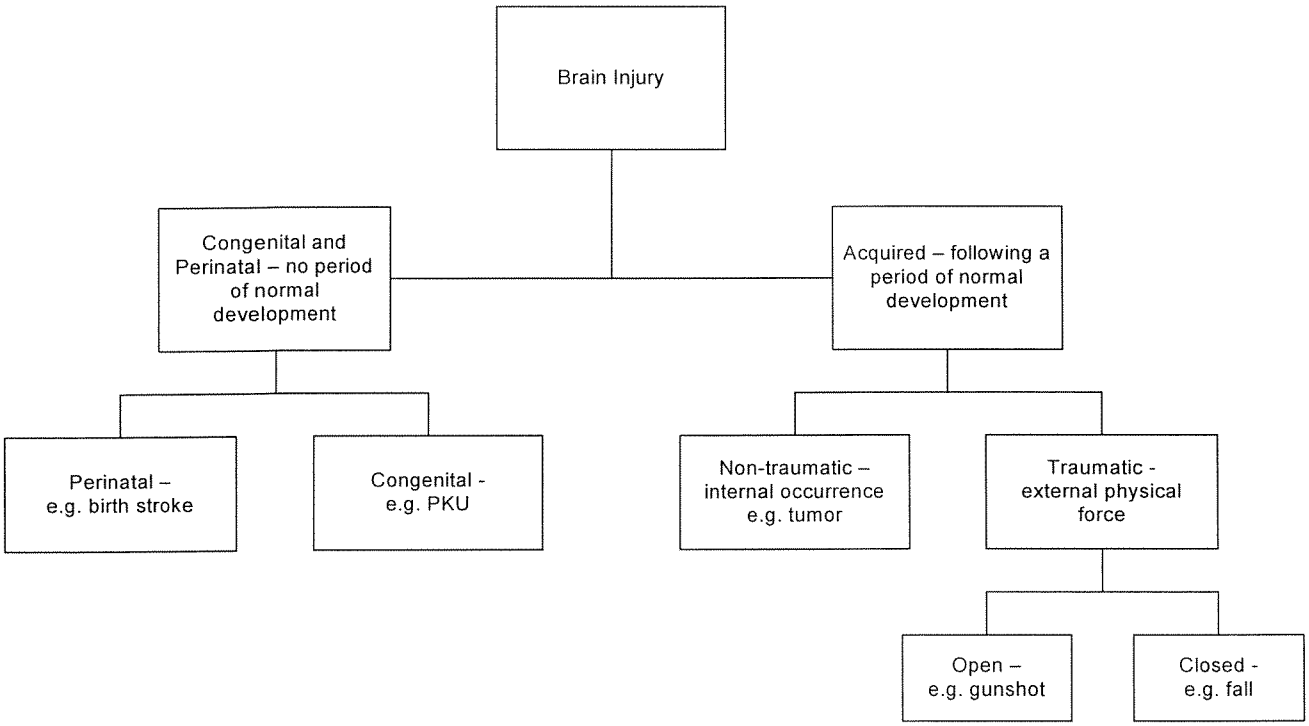
Cognitive rehabilitation refers to a variety of intervention strategies or techniques that attempt to help patients reduce, manage or cope with cognitive defects caused by brain injury. These cognitive impairments may include: impaired memory or retrieval of information, impaired comprehension, slow thought processing, reduced attention span, difficulty understanding cause and effect, inability to prioritize thoughts or determine the main idea, difficulty following a schedule, and misunderstandings or misperceptions of abstract, conceptual, or complex information. Cognitive rehabilitation strategies are comprised of tasks designed to retrain the individual or alleviate problems caused by deficits in attention, visual processing, problem solving, executive functions, memory, language, and reasoning skills.

Until 2000, Hawaii residents with traumatic brain injury received cognitive rehabilitation at the Hawaii State Hospital but budget constraints eliminated that program in 2000. Subsequently, one of the discontinued program's doctors opened his own clinic to provide these services, often as charitable work. Then that doctor died, and services are no longer as readily available to traumatic brain injury survivors. Noting the lack of services, long rehabilitation process for traumatic brain injury patients, and the lack of coverage by some health benefit plans, the 2004 Legislature expressed concern about the situation. Through Senate Concurrent Resolution No. 37 (SCR No. 37), the Legislature asked the State Auditor to conduct an assessment, pursuant to Sections 23-51 and 23-52, Hawaii Revised Statutes (HRS), of the social and financial impacts of mandating insurance coverage for cognitive rehabilitation services.

Traumatic Brain Injury

All brain injuries are of two types: at or around birth, or occurring later in life. As shown in Exhibit 1.1, the later type of brain injury is classified as an acquired brain injury, of which traumatic brain injury is a subcategory.

Exhibit 1.1
Types of Brain Injuries



Source: Epidemiology of Traumatic Brain Injury, Brain Injury Conference, April 3, 2003, Fargo, North Dakota, Kyle Muus, Ph.D.

For people less than 75 years old, half of traumatic brain injuries are due to accidents involving automobiles, motorcycles, and bicycles. For those 75 years and older, falls cause the majority of traumatic brain injuries. Other causes of traumatic brain injuries include violence, such as firearm assaults, child abuse, and sports injuries.

According to the Centers for Disease Control and Prevention (CDC), an estimated 5.3 million Americans (2 percent of the population) currently live with disabilities resulting from traumatic brain injury. The CDC also estimated that in 1998, 339 people were hospitalized in Hawaii due to nonfatal traumatic brain injuries. The CDC tracks traumatic brain injuries using two categories—prevalence and incidence. Prevalence is the number of existing cases at any given time. Incidence is the number of new cases at any given time. However, the prevalence of traumatic brain injury is not well documented because most cases are not fatal and patients may not have been hospitalized. Incidence varies by the severity of injury: mild, moderate, or severe. The incidence of mild traumatic brain injury is about 131 cases per 100,000 people; moderate traumatic brain injury is about 15 cases per 100,000 people; and severe traumatic brain injury is about 14 cases per 100,000 people. The number of severe cases increases to 21 cases per 100,000 people if pre-hospital deaths are included.

Discrepancies in data collection for traumatic brain injury can be attributed to several factors. Many patients with mild injury may not go to a hospital, and those who do may be discharged from an emergency room without adequate documentation. Severe injuries resulting in death at the scene of an accident or during transport to a hospital may not always be accounted for in data collection. A third factor is the differences in diagnostic tools and admission criteria, which may affect severity classifications. Finally, diagnostic imaging may result in changes to findings at different points in time (for example, an early examination may be normal, but a subsequent one may reveal injury).

Cognitive Rehabilitation

According to the National Academy of Neuropsychology, cognitive rehabilitation is an integral component of brain injury rehabilitation, and medical physical rehabilitation services are not sufficient for comprehensive treatment. The desired outcome of cognitive rehabilitation is an improved quality of life or an improved ability to function in home and community life. Restorative training focuses on improving a specific cognitive function, and compensatory training focuses on adapting to the presence of a cognitive deficit. Additionally, psychologists note that cognitive rehabilitation helps traumatic brain injury patients over the long-term. Long-term training is repetitive in

nature because the more patients are stimulated, the more connections are made in the brain, which then improves functioning. However, improvement does not always occur quickly, leading some to question the cost-benefit ratio of the therapy.

Treatment Costs of Mandated Benefits

According to a 1998 U.S. Government Accountability Office (GAO) report on traumatic brain injury, federal and state governments pay for a large part of post-acute services for adults with traumatic brain injury. This happens because private insurance generally limits post-acute services and does not pay for long-term care. The GAO report looked at nine states with Medicaid- or state-funded programs that provide long-term community-based services to adults with traumatic brain injury. The GAO found that the number of adults with traumatic brain injury who receive services remains small relative to estimated demand. Those most likely to have difficulty accessing services include individuals with cognitive impairment who lack physical disabilities.

Persons with traumatic brain injury are covered by a variety of insurers, depending on the cause of the injury. Those injured in automobile accidents may be covered by auto insurance. If the injury occurred on the job, workers' compensation provides benefits. Health plans and veterans' benefits are other sources of coverage. Third party support generally tapers off as service goals move from medical stabilization to community reintegration.

A study of mandated benefit costs by the Texas Department of Insurance showed that such cost impacts vary from less than 5 percent to more than 20 percent. However, the study noted that research is hampered by inconsistent definitions and data collection methodologies. The study concluded that while cost-effectiveness studies provide some useful information, cost alone should not be the determining factor.

Objectives of the Assessment

The objectives of this assessment are to:

1. Describe the social and financial impacts of mandating coverage for cognitive rehabilitation for traumatic brain injury.

2. Make recommendations as appropriate.

Scope and Methodology

Our assessment examined the social and financial impacts of mandating coverage for cognitive rehabilitation for traumatic brain injury survivors in Hawaii as required in SCR No. 37.

We reviewed the relevant federal regulations and programs, Hawaii's statutes and rules, and other states' regulations. We reviewed literature regarding insurance needs, cognitive rehabilitation, and traumatic brain injury. We interviewed interest groups and state and federal officials. In addition, we collected information regarding other states' practices on cognitive rehabilitation insurance for traumatic brain injuries.

We also surveyed consumer groups, insurers, and labor unions to learn their perspectives on the social and financial impact of mandating cognitive rehabilitation for traumatic brain injury.

To assess the potential social and financial impacts of mandating this coverage, we used the criteria set forth in Section 23-52, HRS, as applicable:

Social impact

1. The extent to which the treatment or service is generally utilized by a significant portion of Hawaii's population.

2. The extent to which such insurance coverage is already generally available.

3. If coverage is not generally available, the extent to which the lack of coverage results in persons being unable to obtain necessary health care treatment.

4. If the coverage is not generally available, the extent to which the lack of coverage results in unreasonable financial hardship on those persons needing treatment.

5. The level of public demand for the treatment or service.

6. The level of public demand for individual or group insurance coverage of the treatment or service.

7. The level of interest of collective bargaining organizations in negotiating privately for inclusion of this coverage in group contracts.

8. The impact of providing coverage for the treatment or service (such as changes in morbidity, mortality, quality of care, change in practice patterns, provider competition, or related items).

9. The impact of any other indirect costs upon the costs and benefits of coverage as may be directed by the Legislature or deemed necessary by the Auditor.

Financial impact

1. The extent to which insurance coverage of the kind proposed would increase or decrease the cost of the treatment or service.

2. The extent to which the proposed coverage might increase the use of the treatment or service.

3. The extent to which the mandated treatment or service might serve as an alternative for more expensive treatment or service.

4. The extent to which insurance coverage of the health care service or provider can be reasonably expected to increase or decrease the insurance premiums and administrative expenses of policyholders.

5. The impact of this coverage on the total cost of health care in Hawaii.

Our assessment was conducted from June 2004 to September 2004 in accordance with generally accepted government auditing standards.

Chapter 2

Assessment of Proposed Mandatory Health Insurance For Cognitive Rehabilitation

While proponents feel there is no doubt about cognitive rehabilitation's effectiveness, our review found that definitive information is needed before mandated health insurance requirements are enacted. Survey results from consumers and insurance companies revealed conflicts. Current literature indicates scientific studies are on-going, and existing studies have not definitively determined the efficacy of cognitive rehabilitation for traumatic brain injuries. Therefore, we find that the social and financial impact of health insurance coverage for cognitive rehabilitation for traumatic brain injury cannot be determined fully at this time.

Summary of Finding

The social and financial impacts of requiring health insurers to offer coverage for cognitive rehabilitation for traumatic brain injury cannot be determined at this time.

Current Information on Cognitive Rehabilitation Is Inconclusive

Our review of available literature concluded that the benefits of cognitive rehabilitation have yet to be definitively determined. Much of the research has been largely anecdotal. Definitive scientific studies are still in their infancy, and part of the problem with existing studies is the lack of a standard definition for cognitive rehabilitation.

There is no standard definition of cognitive rehabilitation

According to an official at the State Department of Health, there is currently no standard operational definition of cognitive rehabilitation. Without such a definition, it is difficult to identify, study, and quantify the various therapies that can make up cognitive rehabilitation. According to the National Academy of Neuropsychology, despite difficulties inherent in the measurement and definition of cognitive rehabilitation, some techniques apparently have improved the quality of life and functional outcomes of brain injury patients; however, there remains a need for more evidence-based work to further define and tailor cost-effective cognitive rehabilitation treatment.

The National Institute on Disability and Rehabilitation Research acknowledges that cognitive rehabilitation has been an important but

controversial part of the comprehensive rehabilitation approach for people with brain injuries. The institute maintains that definitions of cognitive rehabilitation vary between programs.

The lack of a standard definition for cognitive rehabilitation also makes it difficult for insurance companies to identify the various treatments that comprise rehabilitation. According to the Hawaii Medical Service Association (HMSA), one of the insurance companies that responded to our survey, the range of treatments for cognitive rehabilitation can be extremely broad. This presents unique problems in gathering data. HMSA reported that the key method for identifying diagnoses and treatments for claims purposes is to analyze treatment codes. These codes consist of brief, specific descriptions of each diagnosis or treatment and an identification number. Some cognitive rehabilitation treatments, however, such as neurobehavioral treatment and neurocognitive therapy and rehabilitation, are too general to be associated with particular treatment codes.

Effectiveness of cognitive rehabilitation has not been scientifically proven

The uniqueness of each traumatic brain injury case has also made it difficult to determine effectiveness of cognitive rehabilitation. Given the differences in each patient's case and the variety of techniques available, it is difficult to conduct studies that are consistent and measure the same outcomes. While proponents have provided some evidence that supports the use of cognitive rehabilitation for traumatic brain injury, reviews of available literature show that many questions remain and that experts encourage further scientific studies.

There has been much progress in brain injury research over the last two decades, according to testimony presented at the October 1998 National Institutes of Health (NIH) Consensus Development Conference on Rehabilitation of Persons with Traumatic Brain Injury. However, far less research is available on the efficacy of specific treatment systems in addressing the range of problems faced by traumatic brain injury patients. Other testimony presented at the conference questioned whether cognitive rehabilitation enhances outcomes for persons with traumatic brain injury. The report concluded that very few controlled studies of cognitive rehabilitation have examined direct effects on health outcomes or employment and that future research is necessary.

While some studies have shown positive effects on health outcomes, the 1998 NIH conference testimony argues that studies in this field remain hampered by methodological problems and a lack of long-term health outcome results. Major research shortcomings include the inability to compare studies because of insufficient description of study cohorts, lack of uniformity in outcome measures, and inadequate characterization of

rehabilitation interventions. And, not only are studies not comparable, but most would be extremely difficult to replicate with similar results.

Other literature confirms further studies are necessary. The Technology Evaluation Center for the Blue Cross Blue Shield Association reports that evidence supportive of cognitive rehabilitation as an effective method is offset by findings that failed to show beneficial results. The center reviewed four comparative trials and found little to no collaborative evidence between studies and no study strong enough to stand alone. Overall, these studies do not provide evidence for or against the effectiveness of cognitive rehabilitation.

Another study in the National Library of Medicine found that two randomized controlled trials and one observational study provided evidence that cognitive rehabilitation produces some positive results. However, the durability and clinical relevance of the findings were not established. The study concluded that future research must incorporate standard definitions of treatment and outcome measures.

There are also questions concerning the cost-effectiveness of cognitive rehabilitation. Some studies discussed at the 1998 NIH conference had begun to quantify predictors of costs, but the studies' accuracy of prediction was quite limited. The testimony further stated that many studies touch on issues related to cost-effectiveness, but few give reliable benchmarks on cost or convincing information on cost-effectiveness or cost benefits.

Another study, sponsored by the Agency for Healthcare Research and Quality, a component of the U.S. Department of Health and Human Services, Public Health Service, found that more research is needed on the effectiveness of rehabilitation for traumatic brain injury. The study found no strong evidence supporting one rehabilitation strategy over another. While most treatments appear to have some positive effect, the implication of the study is that everyone involved in traumatic brain injury rehabilitation must work together to improve ongoing research efforts so that future evidence-based reviews will not encounter similar shortcomings.

Experts agree that future research needs to be done regarding the benefits of cognitive rehabilitation and short- and long-term outcomes. Until these are definitively assessed, we cannot be assured that mandating cognitive rehabilitation for traumatic brain injury is warranted.

Most states do not mandate insurance coverage for cognitive rehabilitation

According to the Traumatic Brain Injury Technical Assistance Center National Association of State Head Injury Administrators, only Texas mandates insurance coverage for cognitive rehabilitation for acquired brain injury. The Texas law, passed in 2001, prohibits insurance companies from excluding several types of rehabilitation services. These include cognitive rehabilitation therapy; cognitive communication therapy; neurocognitive therapy and rehabilitation; neurobehavioral, neurophysiological, neuropsychological, and psychophysiological testing or treatment; neurofeedback therapy; remediation; post-acute transition services; and community integration services necessary as a result of and related to an acquired brain injury. According to a psychologist who works with brain injured patients, only post-acute transition services and community reintegration services are not cognitive rehabilitation services. We also note that while Texas includes cognitive rehabilitation for acquired brain injuries among its other health insurance mandates, the state recently has allowed its insurance carriers to offer plans at a lower cost that exclude specific mandates.

While several other states have considered mandatory cognitive rehabilitation insurance, none have chosen to mandate it. This is attributed largely to insufficient information.

Proposed Legislation for Cognitive Rehabilitation Coverage Is Problematic

House Bill No. 2839 (HB 2839), introduced during the 2004 legislative session, mandates health coverage for cognitive rehabilitation. The bill focuses mostly on traumatic brain injury as does SCR No. 37. However, HB 2839 proposes insurance coverage for "acquired brain injury" which is a much broader category and includes non-traumatic conditions, such as tumors. See, for example the categories illustrated in Exhibit 1.1. Proponents of the bill assert that in their haste to meet legislative deadlines, they did not notice the inconsistency. Nonetheless, our assessment was on a narrower category of traumatic brain injury because of the contents of SCR No. 37 and the intent of HB 2839. In the event of further legislative action this definition should be clarified.

There are other problems with HB 2839. The bill omits three areas required by Section 23-51, HRS. The three areas are: extent of the coverage; limits on utilization, if any; and standards of care.

The extent of coverage or limits on utilization is critical information for brain injury patients because rehabilitation can extend for months and even years. However, HB 2839 does identify specific health services and target groups that would be covered as required by Section 23-51, HRS. Subsequent legislation must also incorporate the necessary information.

Social and Financial Impacts

Our findings on the social and financial impacts of mandating cognitive rehabilitation for traumatic brain injuries are gleaned from survey responses sent to labor unions, insurers, and consumers. Consumers included traumatic brain injury survivors, family members, and therapists. While consumers and insurers responded to most questions, the three labor unions that responded expressed no overall position on the issue of cognitive rehabilitation for traumatic brain injury. Their members have not expressed an interest in the coverage, and they had no data to report.

We received responses from 14 consumer groups and five insurance companies. Responses from the consumer groups and insurers often contradicted each other, which added uncertainty to the situation we assessed.

Social impact

1. **The extent to which the treatment or service is generally utilized by a significant portion of Hawaii's population.**

The population that utilizes these services is small. Insurers estimate that between zero and 100 patients a year are treated for traumatic brain injury. Consumers that responded to our survey as therapy providers indicated that they provide services for a few to 240 patients a year. Labor unions declined to answer with specific figures but indicated that their memberships have not expressed an interest in this kind of service. Available literature estimates that about 2 percent of the population suffers from traumatic brain injury.

2. **The extent to which such insurance coverage is already generally available.**

Insurance carriers believe they cover what is medically necessary, while consumers feel coverage is cut off before improvement is maximized.

Insurers maintain that insurance coverage is available for cognitive rehabilitation for traumatic brain injuries. One insurance company indicated that coverage is somewhat available, while four others reported coverage to be generally available. Three companies indicated that cognitive rehabilitation is often integrated with other therapies, such as occupational and physical therapy. One company states that there is no limit on the number of cognitive rehabilitation treatments it allows based on medical necessity. HMSA repeated the concern that the definition of cognitive rehabilitation is problematic and that the definition in HB 2839 is extremely broad. The definitional problem makes it difficult to gather data.

Consumer responses conflicted with insurers' comments. Consumers maintain that there is no coverage for cognitive rehabilitation or that most people exhaust their insurance coverage for cognitive rehabilitation. One consumer advocate from the Brain Injury Association of Hawaii stated that most health insurance does not cover necessary cognitive rehabilitation treatments after critical care. Consumers report that consequences can include discontinuing treatment, depleting their own or their families' finances, or becoming a burden to the State and living in state-funded homes.

3. **If coverage is not generally available, the extent to which the lack of coverage results in persons being unable to obtain necessary health care treatment.**

Consumer groups overwhelmingly believed that there was a significant impact from the lack of insurance coverage for cognitive rehabilitation for traumatic brain injury patients. Twelve groups reported a significant impact, and one reported a moderate impact. One individual from a prominent advisory board, however, did bring up the issue of the lack of scientific evidence and consensus on the effectiveness of services for persons with traumatic brain injury.

Two insurers agreed and indicated the impact was moderate or significant, two indicated there would be no impact, and one did not respond to the question.

4. **If the coverage is not generally available, the extent to which the lack of coverage results in unreasonable financial hardship on those persons needing treatment.**

Consumers reported a strong belief that the lack of insurance coverage for cognitive rehabilitation causes a significant hardship on persons needing treatment. A psychologist made the point that cognitive rehabilitation would help people improve faster physically as well as mentally because the brain is stimulated to repair itself. Another consumer noted that without insurance coverage, patients often forego treatment and become a burden to the state.

Insurer responses were inconclusive. One reported no impact, one reported moderate impact, and one reported significant impact. Two provided no responses to the questions on impact.

5. **The level of public demand for the treatment or service.**

For the most part, consumers indicated a moderate to significant demand for services, while insurers indicated little to no demand. Insurers estimated there would be zero to about 100 patients a year, but one

insurer reiterated the point that the uncertain definition of cognitive rehabilitation makes it difficult to identify which specific services would be included. Two consumers indicated that specific demand numbers were not available.

6. **The level of public demand for individual or group insurance coverage of the treatment or service.**

This is unknown. As noted in item five above, consumers thought there was a moderate to significant demand, while insurers indicated little or no demand. One insurance company stated that no employer group has inquired about obtaining this coverage while one said that there is no demand because the insurer already covers the treatment. Another insurer cited the difficulties in identifying services.

7. **The level of interest of collective bargaining organizations in negotiating privately for inclusion of this coverage in group contracts.**

Four insurers said they had had no requests from collective bargaining organizations to include cognitive rehabilitation for traumatic brain injuries; one did not respond.

8. **The impact of providing coverage for the treatment or service (such as morbidity, mortality, quality of care, change in practice patterns, provider competition, or related items).**

Responses indicated that quality of life would improve for traumatic brain injury patients. However, there is not enough data to report on other impacts.

Consumers emphasized that quality of life for patients would improve. They reported patients recover faster with cognitive rehabilitation and that a rise in cognitive functioning could reasonably be associated with increased independence and less reliance on caregivers. One consumer reported that there is a significant impact on morbidity, mortality, and cost, both to the individual and community.

Insurers' responses varied. One noted that impact depends on the operational definition of cognitive rehabilitation that research supports the benefits of cognitive rehabilitation on quality of life but the degree to which cognitive rehabilitation impacts morbidity and mortality is less clear. Another insurer said longer treatments do not automatically translate to better treatment, so quality of care may in fact decrease and there would be no impact on morbidity and mortality. A third reported there would be no impact as long as the patient was an eligible employee of the insured company. The other two insurers did not respond.

9. **The impact of any other indirect costs upon the costs and benefits of coverage as may be directed by the Legislature or deemed necessary by the Auditor.**

The impact on indirect costs does not appear to be significant. Two insurers stated that premiums would increase, while the others either did not respond or could not identify the effect on costs. Five consumers thought the impact would be minimal, and two reported they were not certain what indirect costs included. The other consumers did not respond.

Financial impact

1. **The extent to which insurance coverage of the kind proposed would increase or decrease the cost of the treatment or service.**

While most responses showed an expected increase, two insurers did not respond, and three consumers projected reduced costs because of efficiency gains in serving more patients or because other services would be needed less.

Responses varied regarding the extent of change. Seven consumers thought any increase would be moderate or significant, and four thought a decrease in cost would be significant. Three insurers did not respond, one estimated a low increase, and another estimated a moderate increase.

2. **The extent to which the proposed coverage might increase the use of the treatment or service.**

There was consensus that the proposed coverage would increase the use of cognitive rehabilitation. But the extent of the increase varied from low to significant, with consumers expecting a significant increase. Two insurers estimated a small increase, two a moderate increase, and one a moderate to significant increase. Six consumers estimated a significant increase, three a moderate increase, and four a low increase. One consumer did not respond.

3. **The extent to which the mandated treatment or service might serve as an alternative for more expensive treatment or service.**

Most respondents indicated that mandating cognitive rehabilitation for traumatic brain injury would not serve as an alternative for more expensive treatment. Two insurers agreed with this statement, two did not respond, and one said the most effective treatment is generally the least expensive in the long run. The consensus of the consumers was that there is no alternative treatment for cognitive rehabilitation.

4. **The extent to which insurance coverage of the health care service or provider can be reasonably expected to increase or decrease the insurance premiums and administrative expenses of policyholders.**

Most responses reflected an expectation of an increase in premiums. Responses regarding the level of increase varied, but tended to indicate a low level of increase. Only two insurers responded, and both expected an increase. One estimated the increase to be low; the other did not estimate the level of increase. Nine consumers expected an increase in premiums, while three expected no increase or a decrease. Two did not respond. Of those that expected an increase, four expected it to be low, three expected it to be moderate, and one expected it to be high. Three did not respond.

5. **The impact of this coverage on the total cost of health care.**

Responses varied regarding the impact on total cost of health care. Three insurers expected an increase but could not estimate numbers. Two did not respond. Six consumers responded that costs would not increase or would be lessened. They maintain that because the number of traumatic brain injury patients is statistically insignificant compared to the total number of patients covered by insurance, premiums should be unaffected, and overall costs should decrease over time because fewer patients would require expensive treatments, nursing home care or lifelong care. One expected a moderate increase, and one said that costs may increase a great deal, while one was unsure of the impact but did not expect a significant increase in total health care costs. Five did not respond.

Conclusion

It is difficult to determine the social and financial impacts of mandating insurance coverage for cognitive rehabilitation for traumatic brain injuries at this time. Our determination is hampered by the lack of a standard definition and more scientific evidence on effective treatments. Experts and current literature support the need for more definitive scientific studies. The issue should be revisited when those studies become available.

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Responses of the Affected Agencies

Comments on Agency Responses

We submitted a draft copy of this report to the Departments of Commerce and Consumer Affairs and Health on October 20, 2004. A copy of the transmittal letter is included as Attachment 1.

Both the Departments of Commerce and Consumer Affairs and Health opted not to provide responses.

ATTACHMENT 1

STATE OF HAWAII
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October 20, 2004

COPY

The Honorable Chiyome L. Fukino
Director of Health
Department of Health
Kinau Hale
1250 Punchbowl Street
Honolulu, Hawaii 96813

Dear Dr. Fukino:

Enclosed for your information are three copies, numbered 6 to 8, of our confidential draft report, *Assessment of Proposed Mandatory Health Insurance for Cognitive Rehabilitation.* We ask that you telephone us by Friday, October 22, 2004, on whether or not you intend to comment on our recommendations. If you wish your comments to be included in the report, please submit them no later than Friday, October 29, 2004.

The Department of Commerce and Consumer Affairs, Governor, and presiding officers of the two houses of the Legislature have also been provided copies of this confidential draft report.

Since this report is not in final form and changes may be made to it, access to the report should be restricted to those assisting you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

Marion M. Higa
State Auditor

Enclosures